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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,337	09/30/2003	Michiyasu Nosaka	01-491	4041

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POSZ LAW GROUP, PLC
12040 SOUTH LAKES DRIVE
SUITE 101
RESTON, VA 20191

EXAMINER

BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/673,337	Applicant(s) NOSAKA ET AL.	
	Examiner Greg Binda	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/30/03</u> . | 6) <input type="checkbox"/> Other: ____. |

Drawings

1. The drawings are objected to because:
 - a. Reference characters 14A & 14B are each used to identify a respective feature in Figs. 3 & 4 and then reused to identify a modification of said respective features in later drawings. Such usage is proscribed. See MPEP § 608.02(e)
 - b. Reference numeral 15 appears in Figs. 3, 4 & 7-10, but is not mentioned in the description.
 - c. Reference characters A, B & O appear in Figs. 5 & 6, but are not mentioned in the description.
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because:
 - a. At page 7, line 12, the reference numeral 13c should be changed to 13a.
 - b. At page 8, line 2, the reference numeral 12 should be changed to 13.
 - c. At page 10, line 9, the reference numeral 14 should be changed to 14a.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 15-17, recites the limitation, “the second protruding portion protrudes towards the first rotating member with being displaced from the first protruding portion”. The meaning of the limitation is unclear.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2 & 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Trivailo, SU 750165. Trivailo shows a torque transmission system for transmitting torque from a driving unit to a rotation unit, the system comprising:

a first rotating member 11 rotated by receiving the torque by the driving unit;

a second rotating member 12 that is connected to a rotating portion of the rotation unit, rotated along with the rotation portion, and disposed coaxially with the first rotating member; and

a first elastic member 5 and a second elastic member 6, each of which is elastically transformable and disposed as being sandwiched between a first protruding portion 15 of the first rotating member and a second protruding portion 14 of the second rotating member,

wherein the first protruding portion protrudes towards the second rotating member while the second protruding portion protrudes towards the first rotating member,

wherein, when the first elastic member 5 contacts both the first 15 and second 14 protruding members, the second elastic member 6 is disposed as being apart, with a gap, from the second protruding member 14.

When the torque transmitted is great enough to break any one of the members, then the transmitted torque is interrupted.

8. Claims 1-3 & 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Polakowski, US 6,123,620. Polakowski shows in Figs. 1, 4, 8 & 9, a torque transmission system 14 for transmitting torque from a driving unit 10 to a rotation unit 18, the system comprising:

a first rotating member 52A rotated by receiving the torque by the driving unit;

a second rotating member 52B that is connected to a rotating portion 16 of the rotation unit, rotated along with the rotation portion, and disposed coaxially with the first rotating member; and

a first elastic member 42, 46, 46 and a second elastic member 48, each of which is elastically transformable and disposed as being sandwiched between a first protruding portion 50A of the first rotating member and a second protruding portion 50B of the second rotating member,

wherein the first protruding portion 50A protrudes towards the second rotating member 52B while the second protruding portion 50B protrudes towards the first rotating member 52A,

wherein, Fig. 5 shows that when the first elastic member 42, 46, 46 contacts both the first 50A and second 50B protruding members, the second elastic member 48 is disposed as being apart, with a gap, from the protruding members 50.

In col. 9, lines 20+, Polakowski discloses that when the first rotating member is rotated by a given rotation angle in any direction, the second elastic member 48 contacts both the first and second protruding members.

When the torque transmitted is great enough to break any one of the members, then the transmitted torque is interrupted.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4 & 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polakowski. In Fig. 3B, Polakowski shows that in the transmission system 14 the transmission torque 38 is designed to be not more than that 30 found in prior art transmission systems. Polakowski does not expressly disclose that for a rotation angle of five degrees, the transmission torque is no more than 26Nm for normal rotation or 10Nm for reverse rotation. However, it would have been obvious to one of ordinary skill in the art to design the transmission system of Polakowski so that for a rotation angle of five degrees, the transmission torque would be no more than 26Nm for normal rotation and no more than 10Nm for reverse rotation, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda
Primary Examiner
Art Unit 3679